

SAT Report

PMN Number: **P-12-0139**

SAT Date: **1/13/2012**

Print Date: **8/19/2014**

Related cases:

Concern levels:

Type of Concern:	<u>Health</u>	<u>Eco</u>	<u>Comments</u>
Level of Concern:	1-2	3	

<u>Persistence</u>	<u>Bioaccum</u>	<u>Toxicity</u>	<u>Comments</u>
1	2	2	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	

Exposure Based Review:

Health: No

Ecotox: Yes

Routes of exposure:

Health: Dermal Drinking Water Inhalation

Ecotox: All releases to water

Fate: ;

Keywords:

Keywords:

Summary of Assessment:

Fate:

Fate Summary: P-12-0139

FATE: Estimations for typical

log Koc = 3.63 (E)
 log Fish BCF = 2.27 (E)
 log Fish BAF = 3.51 (E)
 POTW removal (%) = 90-99 via sorption and stripping
 Time for complete ultimate aerobic biodeg = da-wk
 Sorption to soils/sediments = strong - v.strong
 Volatilization half-life from a standard river = 4 hrs
 Volatilization half-life from a standard lake = 5 da
 Atmospheric Oxidation Half-life = 3.3 hr via OH radical
 Atmospheric Oxidation Half-life = 23 hr via ozone
 PBT Potential: P1B2
 *CEB FATE: Migration to ground water = negl - slow

Health:

Health Summary: Expect moderate absorption via all routes (pchem), expect oxidation of the terminal double bonds via an epoxide intermediate. Concern for skin and lung sensitization, mutagenicity, oncogenicity, developmental toxicity, male reproductive, liver, and kidney toxicity based on the epoxide oxidation product to the extent that compounds with terminal double bonds are present in the mixture; solvent irritation and neurotoxicity; and lung toxicity from chemical pneumonia if inhaled.

Ecotox:

Test Organism	Test Type	Test End Point	Predicted	Measured	Comments
fish	96-h	LC50	*		
daphnid	48-h	LC50	*		
green algal	96-h	EC50	0.036		
fish	—	chronic value	0.005		
daphnid	—	chronic value	0.008		
algal	—	chronic value	0.057		
Sewage Sludge	3-h	EC50	—		
Sewage Sludge	—	Chronic Value	—		

Ecotox Values Comments:

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern	1	

(ppb)		
SARs	neutral organic compounds	
SAR Class	hydrocarbon	
Ecotox Category		

Ecotox Factors Comments:

SAT Chair: L Keifer 564-8916

Focus Report
New Chemicals Program
PMN Number: **P-12-0139**

Focus Date: 01/23/2012 12:00:00 AM Report Status: Completed
Consolidated Set:
Focus Chair: Rose Allison Contractor: Jessica Baxter

I. Notice Information

Submitter: Sasol North America, Inc. CAS Number: 1350428-64-6
Chemical Name: 1-Octene, manuf. of, by-products from, distn. residues
Use: [REDACTED]
Other Uses: [REDACTED]
PV-Max:
Manufacture: X Import:

II. SAT Results

(1) **Health Rating:** 1-2 **Eco Rating:** 3 **Comments:** ;

Occupational: 2-3C **Non-Occupational:** **Environmental:** 3

(1) **PBT:** 1 2 2 **Comments:**

III. OTHER FACTORS

Categories:

Health Chemical Category: Ecotox Category: neutral organic compounds

Related Cases/Regulatory History:

Health related Cases:

Ecotox Related Cases:

Regulatory History:

MSDS/Label Information:

MSDS: Yes Label: No
General Equipment: Mechanical ventilation. Face shield and chemical goggles. Full protective clothing, boots, and gloves.
Respirator: NIOSH/MSHA-approved vapor air-purifying respirator, self-contained breathing apparatus, or air-supplied respirators dependent on concentration.
Health Effects: Full strength exposure to this product may cause severe corneal and ocular irritation. Repeated or prolonged contact with skin may also be irritating and cause reddening and scaling of the skin. Inhalation in high concentrations may be irritating to upper respiratory tract.
TLV/PEL (PMN or raw material): - none established

Exposure Based Information:

Exposure Based Review: Y Exposure Based Review (Health): N
Exposure Based Review (Eco): Y Exposure Based (Occupational): No
Exposure Based Review (Non Occupational): Exposure Based (Environmental):

IV. Summary of SAT Assessment

Fate:

Fate Summary: P-12-0139
FATE: Estimations for typical 5-methylundec-1-ene MW 168 C12H24

[REDACTED]

Assessment Factor: 10
Concern Concentration: 1

V. Summary of Exposures/Releases

Engineering Summary: P-12-0139

Exposures/Releases	Release	Release	Release
Scenario	Manufacturing	Manufacturing	Manufacturing
Sites			
Media	Air	Air	Water or Incineration or Landfill
Descriptor A	Typical	Output 2	Conservative
Quantity A (kg/site/day)			
Frequency A (day/year)		1	1
Descriptor B	Worst Case		
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

Engineering Summary: Exposures/Releases	Release	Release	Release
Scenario	Manufacturing	Manufacturing	Use:
Sites			
Media	Air	Air	Deepwell Injection
Descriptor A	Typical	Output 2	Output 2
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B	Worst Case		
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

V. Summary of Exposures/Releases

Engineering Summary: P-12-0139

Exposures/Releases	Release	Release	Release
Scenario	Use: [REDACTED]	Use: [REDACTED]	Use: [REDACTED]
Sites	[REDACTED]	[REDACTED]	[REDACTED]
Media	Landfill	Air	Water or Landfill
Descriptor A	Output 2	Output 2	High End
Quantity A (kg/site/day)	[REDACTED]	[REDACTED]	[REDACTED]
Frequency A (day/year)	[REDACTED]	[REDACTED]	[REDACTED]
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From	[REDACTED]	[REDACTED]	[REDACTED]
Workers			
Exposure Type			

Engineering Summary: Exposures/Releases	Release	Release	Release
Scenario	Use: [REDACTED]	Use: [REDACTED]	Use: [REDACTED]
Sites	[REDACTED]	[REDACTED]	[REDACTED]
Media	Air	Air	Water or Incineration or Landfill
Descriptor A	Output 2	Output 2	Conservative
Quantity A (kg/site/day)	[REDACTED]	[REDACTED]	[REDACTED]
Frequency A (day/year)	[REDACTED]	[REDACTED]	[REDACTED]
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From	[REDACTED]	[REDACTED]	[REDACTED]
Workers			
Exposure Type			

V. Summary of Exposures/Releases

Engineering Summary: P-12-0139

Exposures/Releases	Release	Exposure	Exposure
Scenario	Use: [REDACTED]	Manufacturing	Manufacturing
Sites	[REDACTED]	[REDACTED]	[REDACTED]
Media	Incineration	Dermal	Inhalation
Descriptor A	Output 2	High End	Worst Case
Quantity A (kg/site/day)	[REDACTED]	[REDACTED]	[REDACTED]
Frequency A (day/year)	[REDACTED]	[REDACTED]	[REDACTED]
Descriptor B			Typical
Quantity B (kg/site/day)			[REDACTED]
Frequency B (day/year)			[REDACTED]
From	[REDACTED]	[REDACTED]	[REDACTED]
Workers			
Exposure Type			

Engineering Summary: Exposures/Releases	Exposure	Exposure	
Scenario	Use: [REDACTED]	Use: [REDACTED]	
Sites	[REDACTED]	[REDACTED]	
Media	Dermal	Inhalation	
Descriptor A	High End	Worst Case	
Quantity A (kg/site/day)	[REDACTED]	[REDACTED]	
Frequency A (day/year)	[REDACTED]	[REDACTED]	
Descriptor B		Typical	
Quantity B (kg/site/day)		[REDACTED]	
Frequency B (day/year)		[REDACTED]	
From	[REDACTED]	[REDACTED]	
Workers	[REDACTED]	[REDACTED]	
Exposure Type	[REDACTED]	[REDACTED]	

VI. Focus Decision and Rationale

Regulatory Actions

Regulatory Decision: PMN Ban Pending Upfront Testing

Decision Date: 01/23/2012

Type of Decision:

Rationale:

P-12-0139 will be regulated under the TSCA 5(e) category (neutral organics) Ban Pending Up-Front Testing under the risk based and exposure based authority for ecotoxicity concerns. Human health hazard concerns were low-moderate for inhalation and dermal exposures. Potential risks to workers were addressed with appropriate PPE. Ecotoxicity hazard concerns were high based on EcoSARs predictions for neutral organics. Chronic risks to the environment were due to releases to water where the chronic COC of 1 ppb was exceeded 20 days (SWC) during use operations. Acute risks to the environment were due to releases to water where the SWCs of during manufacturing operations, during use operations, and during use operations exceeded the acute COC of 90 ppb. The ecotoxicity testing will be the acute base set including Aquatic invertebrate acute toxicity, test, freshwater daphnids (OPPTS Test Guidelines 850.1010), Fish acute toxicity test, freshwater (OPPTS Test Guidelines 850.1075), and Algal toxicity, Tiers I and II (OPPTS Test Guidelines 850.5400). The fate testing will be the Ready biodegradability test (OPPTS Test 835.3110). Due to low water solubility, the EPA also recommends the special considerations for conducting aquatic laboratory studies (OPPTS Test Guidelines 850.1000). The following EAB exposure based criteria were met: Surface Water Release After Treatment) and Total Release After Treatment). The guidelines for difficult to test substances should be consulted (OPPTS 850.1000). The following CEB exposure based criteria were met: >100 workers with >10 mg/day inhalation exposure. The Program Manager should coordinate with the Office of Water for fracing concerns.

COC: Chronic – 1 ppb, Acute – 90 ppb

Summary of exposures and releases

Manu

Releases to Air:

Releases to Air:

(90.00% Removal)

DW: LADD: [REDACTED]
FI: LADD: [REDACTED]

Use

[REDACTED]
Inhalation: Typical: [REDACTED]
Dermal: [REDACTED]

[REDACTED]

[REDACTED] (90.00% Removal)
SWC: [REDACTED]
DW: LADD: [REDACTED]
FI: LADD: [REDACTED]

PDM1
[REDACTED] (90.00% Removal)
SWC: [REDACTED]
DW: LADD: [REDACTED]
FI: LADD: [REDACTED]
>COC (1.00 ppb) 20 [REDACTED] days/yr

[REDACTED]
[REDACTED]


P2 Rec Comments:
Testing:

Final Recommended:
Health:
Eco:
Fate:
Other:

PMN Summary

Case Number:	P-12-0139	Day in Process: 90	Total Days: 939
Consolidated Cases	No	PMN Summary Only?	<input type="radio"/> Yes <input checked="" type="radio"/> No
PMN Day 1:	01/04/2012	Original PMN Day 90:	04/02/2012
Total Days Suspended:	646	PMN Day 90 (30,45,60):	11/14/2013

Phase	Status	Decision
Post Focus	Archive	PMN Withdrawn Suspended on day 90 through 01/07/2015 (54 Days) Decision Date: 01/15/2014 Decision Type: Decision History: CRSS Decision of Move Forward made on 01/12/2012 Focus Decision of PMN Ban Pending Upfront Testing made on 01/23/2012 Post Focus Decision of PMN Withdrawn made on 01/15/2014

Date 	Final Disposition
Disposition History:	WITH5E Withdrawn in the face of 5E Order on 01/08/2014
CRSS Descriptors:	YX-Exposure-Based 5(e)
Additional Descriptor:	
Withdrawn Date:	

CRSS Date:	01/12/2012
SAT Date:	01/13/2012
Focus Date:	01/23/2012

(Original Subm.) File Name : formdata.pdf
<http://opptcbi2.cbi-epa.gov/webtop/drl/objectId/09022526800d4a77>
Case Number : P-12-0139
Doc.Type : PMN
SRN : SASO120104125925414
Day(1) : 01/04/2012
Attachment(s) List

- Name : [Process Description FINAL](#)
- Name : [Water Accommodating Fraction Toxicity Test R](#)
- Name : [PhysChem Information](#)
- Name : [1H NMR Spectra](#)
- Name : [MSDS](#)
- Name : [Operation Description FINAL](#)
- Name : [CAS IES Report](#)
- Name : [Representative Chemical Structure](#)
- Name : [Toxicity Profile](#)
- Name : [CAS IES Support Materials](#)

Chemist:	Fehir, Rick	Engineer:	Macek
SAT Chair:	L Keifer 564-8916	Exposure Specialist:	Wong/SS
Focus Chair:	Rose Allison	Contractor Support:	<input checked="" type="radio"/> Yes <input type="radio"/> No

PMN Attributes

Chemical Name:	1-Octene, manuf. of, by-products from, distn. residues		
Submitter:		Trade Name:	None
Contact:		Contact Telephone Number:	
Manufacture:	X	Import:	
Polymer:	<input type="radio"/> Yes <input checked="" type="radio"/> No	Grouping for CRSS:	
		Grouping for Focus:	
Production Volume:		Binding Option:	No
IES Order No.:		CAS Number:	
Uses:			

Ratings and Concern Levels:

	Health Ratings	Eco Ratings	Comments
(1)	1-2	3	;

Occupational Exposure:	2-3C
Non-Occupational Exposure:	3
Environmental Exposure:	3
Engineering Drop Criteria/Exposure Drop:	/

Persistence	Bioaccumulation	Toxicity	PBT Comments
(1) 1	(1) 2	(1) 2	(1)

Exposure Based Information

Exposure Based Review (Chemistry):	<input checked="" type="radio"/> Yes <input type="radio"/> No	Exposure Based Review (Health):	<input type="radio"/> Yes <input checked="" type="radio"/> No
Exposure Based Review (Ecotox):	<input checked="" type="radio"/> Yes <input type="radio"/> No	Exposure Based Review (Occupational):	1
Exposure Based Review (Non-Occupational):	<input type="radio"/> Yes <input type="radio"/> No	Exposure Based Review (Environmental):	<input checked="" type="radio"/> Yes <input type="radio"/> No

Criteria		Criteria	
1. Number of Workers Exposed > 1000?	<input checked="" type="checkbox"/>	1. Exposure-Based Fate--Surface Drinking Water?	<input type="radio"/> Yes <input checked="" type="radio"/> No
2. > 100 Workers With > 10 mg/Day Inhalation Exposure	<input checked="" type="checkbox"/>	2. Fish Ingestion:	<input type="radio"/> Yes <input checked="" type="radio"/> No

3a. > 100 Workers With 1-10 mg/Day Inhalation Exposure >100 Days/Yr		3. Exposure-Based Fate--Ground Drinking Water?	<input type="radio"/> Yes <input checked="" type="radio"/> No
3b. > 250 Workers With Routine Dermal Contact > 100 Days/Yr		4. Exposure-Based Fate--Inhalation?	<input type="radio"/> Yes <input checked="" type="radio"/> No
		5. Exposure-Based Fate--Water Releases?	<input checked="" type="radio"/> Yes <input type="radio"/> No
		6. Total Releases:	<input checked="" type="radio"/> Yes <input type="radio"/> No
		7. Consumer Exposure:	<input type="radio"/> Yes <input checked="" type="radio"/> No

Post Focus Agenda Information

Meeting	Meeting Date	Time	Location	Issue	Proposed Decision
CCD Dispo:			5140		
Division Director's:			4140		

Program Manager/Technical Integrator

No.	Assignment	Branch	Resource	Phone	Date Assigned
01.	Program Manager	CCD/NCNMB	Kristan Markey	(202) 564-8716	01/25/2012

Workgroup Assignments

No.	Assignment	Branch	Resource	Phone	Date Assigned
01.	Memo (BPUT)	EETD/EAB	EAB Mailbox	Phone number is missing	06/11/20

SNUR History:

Federal Register Number ; Federal Registry Date ; Reason ; Federal Registry Citation

SNUR Citations:

Sanitization Due Date: ; SNUR notification to reviewers: ; Generic name: ☐ Yes ☐ No

Batch identifier:

CEB Rep: Eric Jackson	EAB Rep:	ICB Rep: Jasbir Sarna	RAD Rep:
Done: <input type="radio"/> Yes <input type="radio"/> No	Done: <input type="radio"/> Yes <input type="radio"/> No	Done: <input type="radio"/> Yes <input type="radio"/> No	Done: <input type="radio"/> Yes <input type="radio"/> No

Notice of Commencement:

Has the case been NOC'd?	<input type="radio"/> Yes <input type="radio"/> No
--------------------------	--

Status History:

1/9/2012 2:27:11 PM -- Phase Initial Review -- kathryn schechter

1/9/2012 2:27:11 PM -- Status Pending CRSS -- kathryn schechter

1/9/2012 4:13:54 PM -- Status changed from Pending CRSS to Scheduled for CRSS -- kathryn schechter

1/12/2012 9:45:09 AM -- Status changed from Pending CRSS to Pending Focus -- Justin Roberts

1/12/2012 9:45:09 AM -- Decision changed from to FWD-Move Forward -- Justin Roberts

1/19/2012 11:15:22 AM -- Status changed from Pending Focus to Scheduled for Focus -- Eric Jackson

1/19/2012 12:07:59 PM -- Status changed from Pending Focus to Scheduled for Focus -- Eric Jackson

1/23/2012 2:23:11 PM -- Phase changed from Initial Review to Post Focus -- Jessica Baxter

1/23/2012 2:23:11 PM -- Status changed from Scheduled for Focus to Ban Pending Testing -- Jessica Baxter

1/23/2012 2:23:11 PM -- Decision changed from FWD-Move Forward to PMN Ban Pending Upfront Testing -- Jessica Baxter

4/13/2012 8:59:52 PM -- Case suspended for 28 day(s) through 5/10/2012 -- Kristan Markey

12/5/2012 1:45:32 PM -- Case suspended for day(s) on 12/5/2012 1:45:32 PM -- Karen Eisenreich

10/24/2013 7:06:13 AM -- Case suspended for 548 day(s) on 4/30/2013 -- kathryn schechter

10/24/2013 7:08:36 AM -- Case suspended for 16 day(s) on 10/24/2013 7:08:36 AM -- kathryn schechter

1/15/2014 3:28:14 PM -- Status changed from Ban Pending Testing to Pending Archive -- Kristan Markey

1/15/2014 3:28:14 PM -- Decision changed from PMN Ban Pending Upfront Testing to PMN Withdrawn -- Kristan Markey

1/15/2014 3:28:14 PM -- Final Disposition has changed from to WITH5E Withdrawn in the face of 5E Order -- Kristan Markey

1/15/2014 3:29:10 PM -- Case suspended for 54 day(s) on 1/15/2014 3:29:10 PM -- Kristan Markey

New Status History Comments :

General Comments:

10/24/2013 7:08:36 AM -- The review period for this case was extended for 16 days due to the government furlough between October 1st 2013 and October 16th 2013. -- kathryn schechter

PMN Summary Comments :
